from the date that common space physical collocation becomes available in that state. A 10-year waiting period is justified in order to provide sufficient time to determine whether stranded investment actually occurs.

2. The Commission Should Prohibit LECs from Assessing a DSL Provider More Than Its Attributable Share of Non-Recurring Physical Collocation Costs and Should Cap Those Costs at $35,000 for a 100-Square Foot Area

The second way in which the Commission should regulate the price that LECs charge for collocation is to limit non-recurring charges assessed upon a single collocator to those costs directly attributable to that collocator, and to cap those costs at $35,000 for a 100-square foot arrangement, and $17,000 for a 25-square foot arrangement. As in the case of the refund rule, if a LEC's costs are not fully recovered as a result of the cap, the LEC should be permitted to petition the state PUC of the state where the stranded costs were incurred for a recovery of those costs, but only after a period of 10 years has passed.

Limiting the non-recurring collocation charges that LECs may recover from a DSL provider to those costs directly attributable to that carrier will help prevent LECs from manipulating non-recurring collocation charges to suppress competition in the DSL market. In the absence of such a rule, some LECs assess a single DSL provider, as an up-front charge, the full cost of constructing a collocation arrangement that is capable of supporting many additional collocation arrangements.[17]

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17. *See, e.g.,* Bell Atlantic Tel. Cos. Tariff F.C.C. No. 1, Sec. 19.6(A) (assessing first collocator *all* costs of room construction, including those attributable to future collocators who may use (continued...)

The brunt of these excessively high non-recurring collocation charges is borne disproportionately by DSL providers, since DSL providers are the first collocators at many of the central offices in which they request collocation space. The rule also is economically efficient since it requires each collocator to bear only the construction costs it causes.[18]

Not only will the DSL market benefit from a rule which limits non-recurring physical collocation charges to those that are directly attributable to the requesting collocator, LECs will not be unduly burdened. This is best demonstrated by the fact that some LECs already recover non-recurring collocation charges in this manner.[19]

In addition to prohibiting LECs from imposing a non-recurring charge on a physical collocator that recovers more than that collocator's directly attributable costs, the FCC also should cap this non-recurring charge at $35,000 for a 100-square foot arrangement and $17,000 for a 25-square foot arrangement. The benefits of a rule capping non-recurring charges for collocation in this manner are twofold. First, it would stimulate competition in the DSL market by reducing the significant up-front capital costs required to enter the market. As discussed above, a competitive DSL provider must collocate at all, or nearly all, of the central offices serving a given metropolitan area before rolling out service to that area. Given the huge non-recurring room construction charges

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17. (...continued)
the same area).

18. *See* Access Charge Reform, *First Report and Order*, 12 FCC Rcd 15982, ¶¶ 28-30 (1997) (recognizing economic distortions occurring when charges are not based on cost causation principles).

19. *See, e.g.,* New York Tel. Co. Tariff P.S.C. No. 914, Sec. 5.1.3(B).

NAS has observed, and the large numbers of central offices serving metropolitan areas, DSL providers need to undertake an extraordinarily large capital expenditure to deploy DSL service. A cap on non-recurring charges of $35,000 and $17,000 for 100-square foot and 25-square foot collocation arrangements, respectively, will lower the capital necessary for entry and thus stimulate competition in the DSL market.

The second benefit of capping the non-recurring charge for collocation is to give LECs an incentive to control the costs of room construction. A LEC typically contracts with a third party to perform the room construction and passes these charges through to the collocator. Under this procedure, neither the contractor nor the LEC has any incentive to minimize construction costs or undertake the construction by the most efficient methods.[20] A cap on non-recurring charges will provide the necessary incentive.

The fact that some collocation tariffs already cap the charge by LECs for non-recurring costs is the best evidence that any burden associated with the cap is insubstantial. For example, Bell Atlantic-Massachusetts recently filed a tariff in which it offers a 100-to-300 square foot collocation

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20. In theory, a requirement that the LEC must, upon request, provide the collocator with a detailed cost breakdown should also provide some incentive to keep costs down. However, in practice, such a requirement often is ignored. *See* Letter from Jonathan P. Aust to Frank Joy (September 3, 1998) (requesting a room construction cost breakdown) (attached hereto as Exhibit 2). To date, Bell Atlantic has not responded to NAS's request, even though a response is required under both its tariff and the Commission's collocation policies. *See id.*

space and facility for a non-recurring charge of $35,000, and a 25-square foot collocation space and facility for a non-recurring charge of $16,319 in any one of 58 central offices.[21]

In order to avoid unlawful confiscation of LEC property in the unlikely event that nonrecurring costs directly attributable to a given collocator exceed $35,000, the rule adopted by the FCC should permit LECs to petition the relevant state PUC for recovery of its stranded costs in an appropriate manner, but the LEC should be permitted to file this petition only after a period of 10 years has passed from the effective date of the rules in this proceeding in order to reduce the LECs' incentive to ignore the $35,000 cap.

3. Section 201(b) of the Act Authorizes the Commission to Adopt Both of These Collocation Pricing Rules

Section 201(b) of the Act gives the Commission authority to adopt both a mandatory refund rule and a rule capping non-recurring costs. That provision authorizes the agency to ensure that the terms and conditions, including price, under which any interstate telecommunications service is provided are "just and reasonable." The FCC has held that a LEC's provision of collocation service constitutes the provision of interstate telecommunications service within the meaning of Section 201(b) if the collocating carrier uses the collocation arrangement to provide interstate service.[22] A carrier requesting collocation in order to provide DSL service of the type described in Part I.C.1.

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21. New England Tel. and Tel. Co. Tariff M.D.T.E. No. 17, filed May 15, 1998. This tariff has been suspended for further review of many issues. *Order*, D.T.E. No. 98-57 (June 3, 1998).

22. Expanded Interconnection with Local Telephone Company Facilities, *Memorandum Opinion and Order*, 9 FCC Rcd. 5154, 5162 (1994) (finding that the provision of collocation service to a carrier using the arrangement to provide interstate service is itself an interstate service subject to the statutory requirements of Section 201(b)).

above would be using the collocation arrangement to provide interstate service as we show in that Part.[23]

C. The FCC Should Require LECs to Allow Central Office Collocators to Deploy Their Own Cable When Interconnecting Their Respective Facilities

The Commission should require that LECs permit a DSL provider to install its own cabling in order to interconnect its collocated facilities with the facilities of any unaffiliated carrier collocated anywhere in the same central office. At present, some LECs require unaffiliated carriers desiring inside office interconnection in different collocation rooms to subscribe to the LECs' tariffed dedicated transit service ("DTS").

A collocated carrier should be permitted to deploy its own cable to make a carrier-to-carrier interconnection within a central office since it can interconnect more economically in that way than by subscribing to DTS. For example, if the interconnection requires eight hours of labor and 100 feet of cable having a capacity of 1,000 loop pairs, a carrier could purchase and install that cable for less than $2,500 whereas it could be required to pay a monthly recurring charge of about $430 ($5160 per year) if it must subscribe to DTS.[24]

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23. The Eighth Circuit has ruled that a different provision in the Act, Section 251(c)(6), does not give the FCC authority to regulate the pricing of collocation service when the collocating carrier uses the collocation arrangement to provide "local intrastate telecommunications services." *Iowa Utilities Bd. v. FCC*, 120 F.3d 753, 794 (8th Cir. 1997), *cert. granted*, 118 S. Ct. 879 (1998). But the Court did not disturb the FCC's earlier holding that Section 201(b) empowers the agency to regulate collocation pricing when the collocation arrangement is used to provide interstate telecommunications service.

24. *See* New York Tel. Co. Tariff No. P.S.C. 914, Sec. 10.5.1(B).

Nor is there any justification for a LEC's refusal to permit a carrier to deploy its own cable. Although Bell Atlantic has claimed that it would be unable to maintain its *own* central office cable racking facilities if non-Bell Atlantic cabling were present, that claim lacks credibility. If Bell Atlantic was concerned about its ability to maintain its own cable racking facilities, it would require a carrier to subscribe to DTS in order to interconnect that carrier's separate collocation areas within a central office. But Bell Atlantic does not do so. Instead, it permits a carrier collocated in two separate areas of a central office to interconnect those collocation locations by installing its own cabling. Moreover, Bell Atlantic cabling and non-Bell Atlantic cabling is indistinguishable for maintenance purposes as long as Bell Atlantic requires all cabling within a central office to be labeled and recorded in accordance with the company's applicable work order procedures.

D. The Commission Should Adopt a Rule to Help Prevent LECs from Denying Requests to Physically Collocate in a Central Office Based on the LEC's False Claim that the Subject Office Lacks Sufficient Space

NAS supports the Commission's proposal to adopt a rule designed to help prevent LECs from denying physical collocation applications based on false claims that the central office at issue lacks adequate collocation space.[25] Although current rules require LECs to substantiate claims of space exhaustion,[26] additional rules are necessary because of persistent abuse of space exhaustion

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25. *Notice* at ¶¶ 146-47.

26. *See* Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, *First Report and Order*, 11 FCC Rcd. 15499 at ¶ 602 (1996) (requiring LECs claiming space exhaustion to provide state commission with floor plans).

claims by LECs.[27] The proposed rule would require a LEC that denies a request for physical collocation to substantiate its denial in several ways. First, the LEC would be required to provide detailed floor plans of the central office in question both to the carrier whose application was denied and to the PUC in the state where the subject central office is located. Second, the LEC would be required to allow the carrier whose collocation application is denied to tour the central office at issue in order to assist that carrier in making a reasoned judgment about whether to challenge the LECs' claim that collocation space is unavailable. Third, the LEC would be required to submit a report to any requesting carrier that describes, for each central office of interest to the requesting carrier, (a) the amount of physical collocation space presently available, (b) the number of collocators, (c) any modifications in the use of space since any previous report provided to that carrier, and (d) measures that the LEC is taking to provide additional collocation space if presently available space is in short supply.

III. A Competitive DSL Market Also Requires Revision of the Commission's OSS and Loop Unbundling Requirements

Although the Commission can help facilitate competition in the DSL market by taking the actions described in Parts I and II, it also must ensure that LECs provide the specialized OSS functionality that carriers need in the loop pre-ordering process in order to provide DSL service. In addition, it must require LECs both to permit carriers to place DSL line cards in remote terminals

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27. *See, e.g.*, Petition of Teleport Communications Group Inc. to Establish Collocation Procedures, Mass. Dept. of Telecommun. and Energy Dkt. No. D.T.E. 98-58 (dated May 14, 1998) (alleging Bell Atlantic-Massachusetts' failure to follow existing rules regarding space exhaustion in its Westboro central office).

and to obtain the distribution and feeder portions of a loop provisioned through a remote terminal as separate network elements. Finally, the agency must require LECs to provide the frequencies on which data is transmitted as a separate unbundled network element in certain situations. Below, we discuss each of these matters in turn.

A. The Commission Should Require LECs to Give Carriers Providing DSL Service the Information About Loop Characteristics that They Need in Order to Provide Service

The Commission should adopt rules governing the ordering of loops for provision of DSL service. The Commission recognizes that special rules governing loop ordering are required since a carrier needs specific information about loop characteristics in order to provide DSL service that is not needed in order to provide other services.[28]

First, the Commission should require that LECs furnish a carrier with the following information when the LEC provides the carrier with a loop in order to provide DSL service:

- What is the copper wire length of the loop?
- Does the loop contain a digital loop carrier?
- What is the make-up (wire gauge) of the loop?
- How many bridge taps does the loop contain, and what is the aggregate bridge tap distance?
- Does the loop contain any load coils?

LECs should be required to provide all of this information since a carrier cannot provide DSL service over a given loop unless it has this information about that loop. A LEC also should be

28. *See Notice* at ¶ 157-58.

required to furnish this information about all loops that serve a particular street address for which a carrier has requested a DSL-capable loop if the LEC claims that no loops serving that address are capable of supporting DSL communications.

Second, the Commission should mandate that a LEC provide carriers offering DSL service with on-line access to the data set forth above for all of the LEC's outside plant by no later than January 1, 1999. On-line access to this data is essential to avoid a delay in responding to a customer's request for service. A requirement to provide on-line access to the required data by January 1, 1999 is reasonable since LECs already maintain this data in connection with their provision of ISDN and T-1 service.

To help ensure that DSL-capable loops are provisioned in a reasonable and nondiscriminatory manner, certain procedural rules are necessary as well. First, LECs should be required to track (and report) loop provisioning time to measure the performance of their OSS for provisioning DSL-compatible loops. Since the amount of time between loop pre-order and provisioning is greater when a DSL-compatible loop is ordered than when any other loop is ordered, failure to track (and report) this variable separately would permit incumbent LECs to process DSL-compatible loop orders on a discriminatory basis without detection.

The Commission also should adopt rules requiring LECs to pay damages for failure, within specified times, to determine DSL-compatible loop availability and to provision DSL-compatible loops. Without a damage remedy, DSL providers can be unfairly disadvantaged through the OSS

and provisioning process even in the presence of rules requiring LECs to process orders within specific time periods.

Not only should the FCC require that LECs comply with the requirements for loop ordering set forth above, it also should require that LECs manage loops as part of its OSS in order to prevent harmful interference. Two rules are necessary to accomplish this objective. First, the agency should make clear that LECs must adopt a loop binder group frequency management program. This program must protect all loops used to provide DSL service from interference by loops in the same binder group that are used to provide any other service. In addition, the program must provide the same interference protection to all carriers.

The Commission also should require all LECs to withdraw their local area data service ("LADS") tariffs to help prevent harmful interference to DSL service. LADS is an offering that provides the subscriber with a loop for transmission of data at low speed. While LADS tariffs make plain that the service is available only for transmitting data at slow speed, there is no reasonable way for LECs to enforce this use restriction. Some carriers ignore the use restriction by providing DSL service using LADS rather than by DSL-compatible loops since the price of LADS is much lower than the price of a DSL-compatible loop, transport, OSS, and collocation service. The LECs' obligation to protect DSL-compatible loops from interference by other loops in the same binder group requires that LECs withdraw LADS tariffs, since using LADS to provide DSL service can cause interference to a DSL-compatible loop on which DSL service is provided if the LADS loop is located in the same binder group loops purchased as unbundled network elements in order to

provide DSL service. While some LECs have withdrawn their LADS tariffs voluntarily (presumably because they are concerned about potential interference to their own DSL offerings), the Commission should require all LECs to do so because of the potential interference to DSL service and since there is no reasonable way for LECs to enforce the tariff provision restricting use of LADS to slow speed transmissions.

B. The Commission Should Require that LECs Permit Carriers to Place DSL Line Cards in Remote Terminals and Obtain, As Separate Network Elements, the Distribution and Feeder Portions of a Loop Provisioned Through a Remote Terminal

The Commission should adopt two different rules to promote competition in the DSL market by enabling competitive DSL providers to offer service to subscribers whose loops are provisioned through digital loop carriers. First, the Commission should require that LECs permit carriers to collocate DSL electronics at the remote terminal for loops provisioned through digital loop carriers. Second, the Commission should require LECs to unbundle such loops into their subloop elements (*i.e.*, feeder plant and copper distribution wire). Both of these measures are necessary to enable carriers to provide the full range of DSL services to the approximately 20 percent of telephone subscribers whose loops are provisioned through digital loop carriers.

Although carriers can provide 128 kbs DSL service (*i.e.*, IDSL) over a loop provisioned through a digital loop carrier without requiring access to the remote terminal, they cannot provide faster transmission speeds without installing an appropriate line card in the remote terminal through which the loop is provisioned. A rule requiring LECs to permit the collocation of DSL line cards

at remote terminals will immediately enable competitive DSL providers to offer a variety of DSL service options to customers served through digital loop carriers.

The Commission also should require LECs to unbundle loops provisioned into their subloop elements. This rule will stimulate facilities-based competition in the DSL market and thereby promote more efficient service and more flexible service options than can be provided using the LECs' facilities alone. For example, a DSL provider could take advantage of a subloop unbundling rule to obtain only the copper distribution subloops for a group of customers, and construct fiber-optic feeder plant connecting those customers to its own office. In this manner the DSL provider could avoid collocating at the LEC's central office and potentially offer a wider variety of service options to its customers.

C. The FCC Should Make Clear that a LEC May Not Offer An End User Both Exchange and DSL Service Over a Single Loop Only When the User Subscribes to the LEC's DSL Offering, and it Should Require LECs to Provide Other Carriers with Unbundled Access to Data Transmission Frequencies on Any Loop that the LEC Uses to Provide Exchange Service

The FCC should take two actions to facilitate DSL competition in the specialized market where DSL service and telephone service are provided over the same loop. Several LECs have filed tariffs with the FCC to initiate DSL service.[29] Each of these tariffs provides an end user with DSL service using the same loop over which the user obtains exchange service, but each tariff makes clear that the user must subscribe to the *LEC's* DSL offering, rather than another carrier's DSL offering, if the user wants the LEC's exchange service.

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29. *See* note 4, *supra*.

The Commission should first make clear that the tying doctrine bars a LEC from offering both exchange and DSL service over a single loop *only* when the user subscribes to the *LECs'* DSL offering. A tying arrangement is unlawful where an entity with market power in a tying product seeks to extend that power into the tied product market by requiring purchasers of the tying product to purchase the tied product from the same company.[30] A LEC plainly engages in unlawful tying if it requires an end user desiring DSL service to obtain that service from the LEC as a condition to obtaining (or retaining) the LEC's exchange service since LECs have market power in exchange service but not in the nascent DSL service market.

Second, the Commission should require LECs to provide other carriers, as an unbundled network element, with unbundled access to the data transmission frequencies on any loops that LECs use to provide exchange service. The FCC has broad authority to define network elements by functionality.[31] It should exercise that authority by defining a loop's data frequencies as an unbundled network element when the LEC itself provides both exchange and DSL service over a single loop in order to prevent LECs from unfairly obtaining market power in the DSL service market. Without such a ruling, a LEC's DSL competitor will be unable to compete in providing DSL service to end users having just one or two loops since the DSL competitor would have to

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30. *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 12 (1984). *See also Amendment of Section 64.702 (Second Computer Inquiry)*, 77 F.C.C.2d 384, 442-43 (1980), *recon*, 84 F.C.C.2d 50 (1980), *further recon.*, 88 F.C.C.2d 512 (1981), *aff'd sub nom. Computer and Commun. Ind. Ass'n v. FCC*, 693 F.2d 198 (D.C. Cir. 1982), *cert. denied*, 461 U.S. 983 (1983), *aff'd on further recon.*, FCC 84-190 (rel. May 4, 1984).

31. *Southwestern Bell Teleph. Co. v. FCC*, 1998 US App. LEXIS 18352 (8th Cir. 1998).

obtain a new loop from the LEC in order to provide DSL service to those users whereas the LEC could provide DSL service to those same users far less expensively by using the user's existing exchange service loop. Allowing LECs unfairly to extend their exchange market power into this segment of the DSL market will substantially harm competition in the DSL market as a whole since about 95 percent of all end users have fewer than three loops.

CONCLUSION

The Commission should take the actions requested above to help facilitate competition in the market for DSL service.

Respectfully submitted,

NETWORK ACCESS SOLUTIONS, INC.

By: _____

Rodney L. Joyce
J. Thomas Nolan
SHOOK, HARDY & BACON
1850 K Street, N.W.
Washington, DC 20004
(202) 452-1450
Its Attorneys

September 25, 1998

Exhibit 1

Non-Recurring Charges
(Virginia)

COST COMPONENT	PHYSICAL COLLOCATION (charges presently in effect)
Design and Planning Fee	$ 3,500
Site Augmentation Fee	$ 1,500
AC Power Outlet	$ 400
Overhead Lighting (single fixture)	$ 900
Cage Construction (100 square foot cage)	$ 5,300
Room Construction	$58,900 (average estimated construction charge
Total Non-Recurring Costs	$70,500

Exhibit 2

NETWORKACCESSSOLUTIONS

September 3, 1998

Frank Joy
Senior Project Manager-Collocation
Bell Atlantic
Telecom Industry Services
375 Pearl Street RM 2101
New York, NY 10038

Dear Frank:

I write this letter in order to discuss to important matters that are relevant to NAS's applications for physical collocation in Bell Atlantic states. Each matter is discussed below.

First, please provide me with a copy of the Bell Atlantic policy that defines the terms under which the company will accept payment of non-recurring costs associated with collocation on an installment basis in each of the following jurisdictions: Virginia, District of Colombia, Maryland, Pennsylvania, Delaware, New Jersey, New York, and Massachusetts. As you know, the FCC has required that Bell Atlantic permit collocating carriers with less than $2 billion per year in telecommunications revenue to pay non-recurring collocation costs over an 18-month period.[1] NAS has less than $2 billion per year in telecommunications revenue, and it is potentially interest in taking advantage of the installment payment plan. Please provide me with a copy of Bell Atlantic's installment payment policy for each of the jurisdictions referred to above by no later than Tuesday, September 8, 1998 so that NAS may determine whether it would benefit by using the installment option in connection with its collocation applications, including the numerous applications it has filed within the past few weeks.

Second, I write in order to respond to Bell Atlantic's letter dated August 26, 1998, stating that NAS must pay estimated room construction costs of $139,750 in order to physically collocate its equipment in the Alexandria, VA central office. For your convenience, a copy of that letter is enclosed.

[1] See NYNEX and Bell Atlantic, 12 FCC Red. 19985, 20110 (1997)

100 Carpenter Dr., Suite 206 Sterling, VA 20164

703.742.7700 703.742.7706 (fax)

www.nas-corp.com

Before NAS can accept this estimated charge, it requires the following documentation form Bell Atlantic:

1. the design plans for room construction in the Alexandria central office;

2. estimated labor costs for each category of construction required by the design plans; and

3. estimated material costs for each category of construction required by these design plans.

In addition, please let us know the number of contractor bids that Bell Atlantic obtained for performing the subject room construction.

Not only does NAS request the above documentation for room construction charges in the Alexandria central office, we also request that Bell Atlantic provide us with such documentation for each application by NAS for physical collocation in a Bell Atlantic central office in any state. NAS is seeking to physically collocate its facilities in a large number of Bell Atlantic central offices in several states. It needs this documentation in order to ensure that its financial resources are used efficiently.

As you know, NAS has a right to obtain this documentation under the FCC's collocation policies. See, e.g., Local Competition Order, 11 FCC Red. 15779-807, (1996); Expanded Interconnection Order, 7 FCC Red. 7369, 7441-47 (1992). NAS also has a right to obtain this documentation under Bell Atlantic's tariff since the tariff requires that Bell Atlantic provide NAS with a breakdown of "the rates for construction work . . . and any vendor (S) charges for materials", and it gives NAS a right to "review [room construction] design." See Bell Atlantic Tariff FCC No. 1 § 19.3.1 (A) and (F).

I ask that you provide us with the requested documentation within 15 days of the date of this letter with respect to the Alexandria collocation applications as well as all other collocation applications that NAS already has submitted. With respect to each future collocation applications, I ask that you provide us with the requested documentation on the same date that you provide us with the total estimated room construction cost applicable to that application.

Sincerely,

Jonathan P. Aust
CEO

JPA/ma